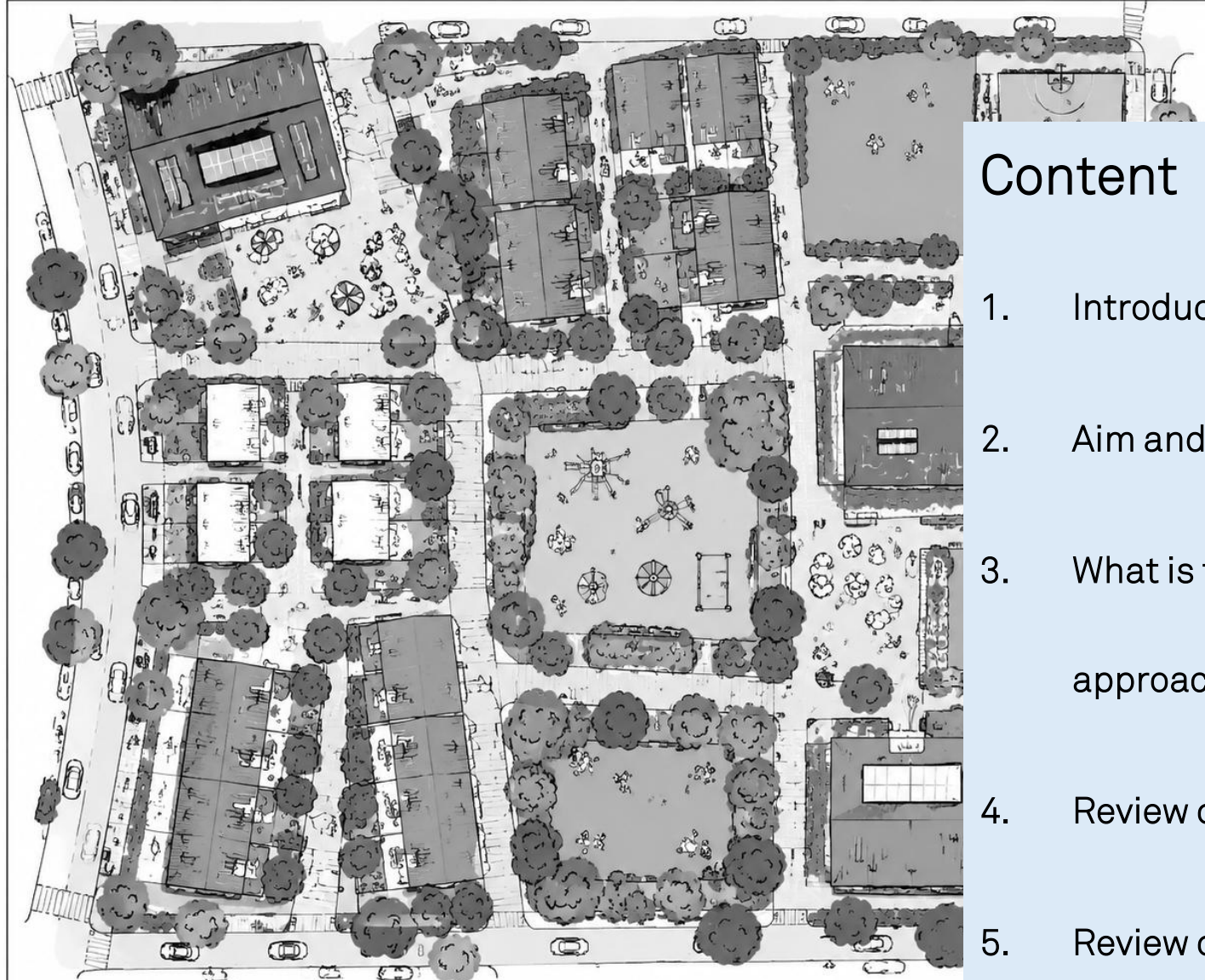




Conceptual illustration – AI-assisted design process

Teaching Unit 14/ Teaching Instruction

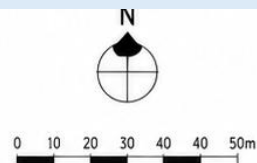


NEIGHBORHOOD ZONE PLAN

A mixed-use neighborhood zone with housing, public spaces, playground, and community facilities.

LEGEND

	RESIDENTIAL BUILDINGS		PUBLIC GREEN SPACES
	COMMUNITY / PUBLIC BUILDINGS		PLAYGROUND
	OPEN SPACES / LAWNS		SPORTS AREA
	PAVED AREAS / PLAZAS		COMMUNITY GARDEN



Content

1. Introduction
2. Aim and Objectice of this document
3. What is the suggested teaching technic; “Design Thinking approach and Empathize Mode “
4. Review of the first teaching scenario
5. Review of the second teaching scenario

1. Introduction?

- Imagine for a moment that a group of students are exploring a Neighborhood .
- They should not have tunnel vision; they are not asked to follow traditional urban planning and design often emphasizes physical infrastructure, spatial arrangements, and architectural form
- They have been asked to take a socio-political perspective and prioritize how people interact with and experience environments
- They need to focus on Nodes (places) and Networks(relations); engagement, accessibility, usability, emotional resonance, and inclusivity in neighborhood, notably public spaces
- They have gathered hundreds of quotes from interviews, dozens of statistics from research and perhaps even a handful of pictures.
- *Finally they push it around their desk, trying to make sense of it all. It would look like a daunting task. Where to begin, and how?*



Photo from Vitaly Gariev in Unsplash

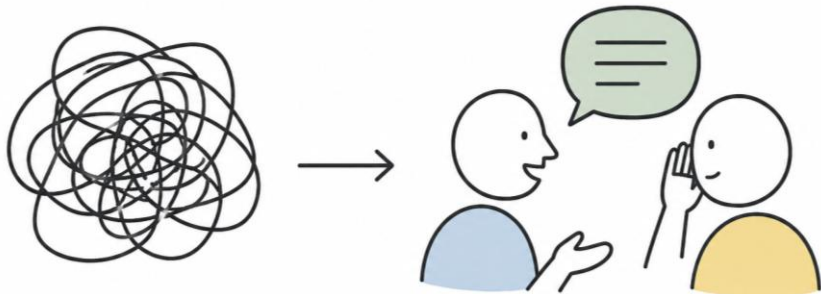
2. Aim and Objectice of this document

➤ The Big Picture !



Nick Fewings in Unsplash

No complexity! Just listen to the users!



- The aim of this document is to stimulate discussion about "[what to teach](#)" and "[how to teach](#)" in urban planning pedagogy in context of social infrastructures and their contribution to social resilience at neighborhoods.
- This unit (the second scenario) aligns well with the concept of exposing students to diverse insights gained from spending time in real places, and with the concept of exposing students to diverse insights gained from secondary datasets (the first scenario) coming from real places and real practices.
- The teaching method advocates for urban planning pedagogy, particularly in studio settings, to emphasize specific multidisciplinary learning and teaching approaches, as well as tools that enable students to foster social innovation and enhance social resilience.

➤ *Here we introduce Design Thinking approach*

- As an approach, design thinking taps into capacities we all have but that are overlooked by more conventional problem solving practices.
- *Not only does it focus on creating products and services that are human centered, but the process itself is also deeply human.*
- It relies on our ability to be intuitive, to recognize patterns, to construct ideas that have emotional meaning as well as being functional, and to express ourselves in media other than words or symbols.
- The design thinking process is best thought of as a system of overlapping spaces including : inspiration, ideation, and implementation 1.

3. What is the suggested teaching technic?

“Design Thinking approach “

Interactive reading of social infrastructure at neighborhood

➤ The Conceptual Method Approach; to bridge the gap between theory and practice

- **Origin:**
This teaching method is developed adapting the Design Thinking methodology from Stanford University.
- **Core Principle:1-5**

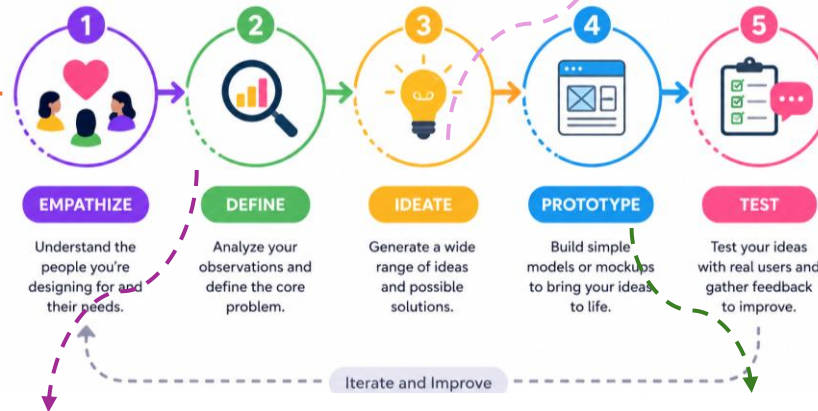
1-Student must first **Empathize**. They should understand the neighborhood, the problem, and the context. They need to imagine what it is like to encounter this problem, and learn how people (civil society practitioners, individuals, local stakeholders, states, etc) interact with it. A good starting point is for them to go out into the world and observe the actual experiences of communities improvise their way through their daily lives (The second scenario in this document, or use), or gained insights from secondary datasets (the first scenario).

3-Afterwards, They must **Ideate**. Once they have a clear understanding of the Problem to Solve, they think of **solutions** that could work for them. they must brainstorm, and sketch, and create story from the Ideas that neighborhood has created to solve their problems. Students are encouraged to figure out **as many ideas as possible**. This lets the group move into a process of grouping and sorting ideas which can steer them to recognizing the role of social infrastructures in Ideation phase. Good ideas naturally rise to the top, whereas the bad ones drop off early on. students will find the importance and the main role of social infrastructure, as well as learn how social infrastructure comes from problems to Ideas

5-Once the student groups have identified their **themes**, they should work to generate **insights** and discuss them **internally** to assess the strength and validity of their ideas. During this process, they are encouraged to critically challenge their insights and examine whether their ideas align with or contribute to the theoretical frameworks introduced at the beginning of the course. After clarifying what their insights mean and determining how they complement existing theories, the groups should present their findings **to other teams** in order to receive constructive feedback and further refine their understanding.

2-After they learn of the problems the civil society face, they must define those problems and find out the **Problem** to Solve. What will the stakeholders at neighborhood to solve

4-After identifying the ideas, students should move on to the **Prototype** phase. In this stage, they become familiar with how communities create representations of their ideas. In fact, this phase allows students to **capture the physical manifestations** of people's experiences—what they do, how they do it, and with whom. It is expected that students will be able to identify and document themes such as the type, spatial characteristics, and socio-political dimensions of social infrastructures.



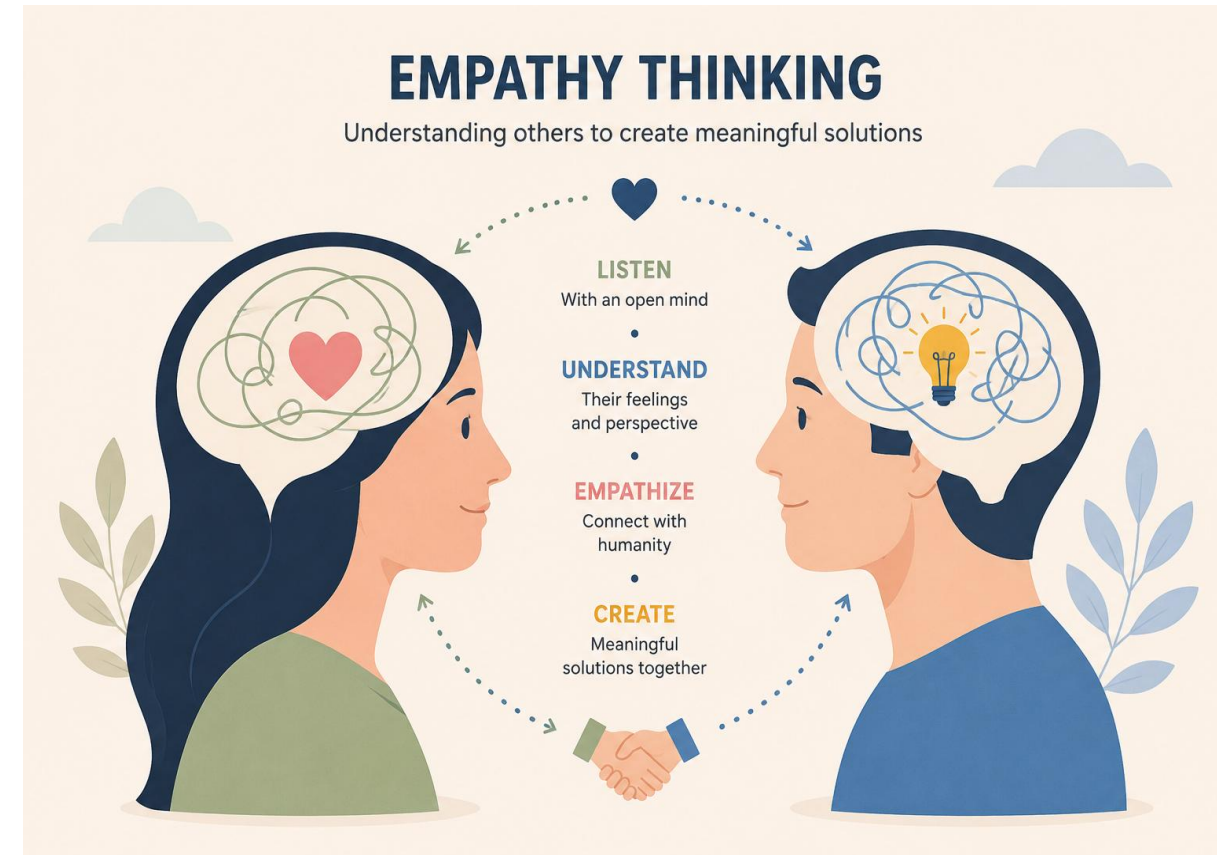
➤ Empathize Mode, What is it?

➤ WHAT is the Empathize mode

Empathy is the centerpiece of a human-centered design process. The Empathize mode is the work you do to understand people, within the context of your design challenge. It is your effort to understand the way they do things and why, their physical and emotional needs, how they think about world, and what is meaningful to them

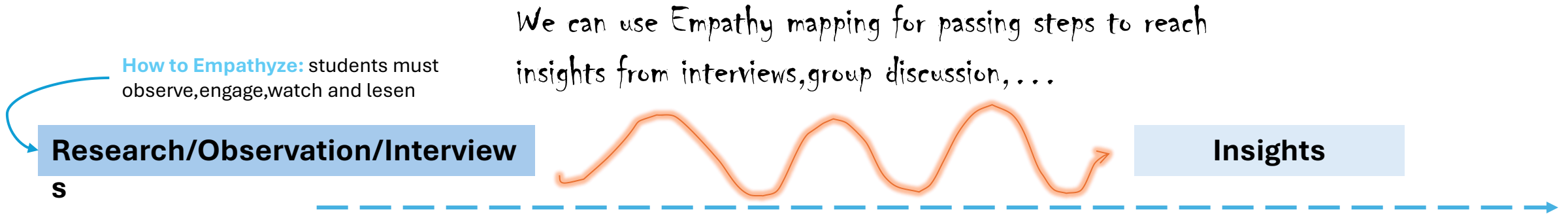
➤ WHY empathize

- ✓ As a design thinker, the problems you are trying to solve are rarely your own—they are those of a particular group of people; in order to design for them, you must gain empathy for who they are and what is important to them
- Observing **what people do and how they interact with their environment** gives you clues about what they think and feel. It also helps you learn about what they need.
- By watching people, student can **capture physical manifestations of their experiences – what they do and say**. This will allow you to infer the intangible meaning of those experiences in order to uncover insights.
- **Insights** give them direction to create **innovative solutions**.
- The **best solutions** come out of the best insights into human behavior(5).



Conceptual illustration – AI-assisted design process

➤ Empathy mapping, Where to use it?



This step transforms your research into meaningful and actionable insights that will become the *foundation of your future planning and design*

Most Challenges !



@ Tanja Tepavac from Unsplash

- Organizing data and descriptions from interviews and recorded information, can be a challenging step.
- We often lack clarity on which data is most important.
- With so much information at hand, it's easy to encounter unrelated data that complicates the process.

How to apply it?



@Marian Kamenistak from [Unsplash](#)

1st Scenario
Choose a case
study from
UPRUN
Database

2nd Scenario
Choose another
case study from
real world
practices

4. First Scenario

Choose a case study from UPRUN
Database

■ *The first scenario ; Choose a case study from UPRUN Database and follow Affinity mapping*



Co-working

0 minute



2X
Teacher+Asist

30 minutes



5-6X

60 minutes



Method Description: Defining Personas from Stakeholder Interviews and following Empathy Mapping process

- In this teaching unit, **students receive ,in advance** , a **summary report** of a case study **from UPRUN database** outlining key themes of the neighborhood based on interviews with various stakeholders, including public sector representatives, private sector members, and local community participants. They are asked to read the report in detail and **prepare some non-verbal story in advance**.
- To support their **understanding of social infrastructure**—an area they may be unfamiliar with—the second phase includes a short **presentation by the teacher** using materials provided by the UPRUN unit in advance, to familiarize students with social infrastructure concepts and key themes.
- In the third step, students groups(has been defined in advance by the teacher) will **create Personas** based on insights from the report. This process will help them better understand social infrastructures and the roles of different stakeholders, particularly urban planners and designers. Following persona creation, they will **engage in affinity mapping** to organize their findings and **identify Themes (Haven,Hubs,Hangaout,etc)** and **Insights including** relationships among personas and key themes such as **bridging, bonding, or hangout dynamics** within the community.
- This activity will enhance students' analytical skills and help them synthesize qualitative data into actionable profiles while effectively communicating stakeholder roles and requirements for future social infrastructure development within resilient neighborhood.

Big Picture from the first Scenario !

First phase : A storyboard from a secondary dataset

In this phase we start with KNOWLEDGE VISUALIZATION IN DESIGN THINKING

- Students will read the summary report in detail and create a storyboard with sketchy notes and sticky notes. *Why?*

Because : *Creating graphic representations of their key findings and carefully analyzing the collected data will enable them to highlight the critical "stories" they've uncovered, rather than just presenting an overwhelming amount of information(Macdonald,2013).in this storyboard, students collect as much data as possible without bias!*

Remember: the goal isn't to create something fancy. It's to think better!

- The purpose of this storyboard design is to help students think clearly before they start to discuss. A well-crafted storyboard translates complex opinion ,Idea and issues into a simple visual narrative.
- It illustrates what stakeholders have been trying to accomplish, the actions they take,the means and tools they used,their relationship with each other, their feelings at each step(could be bonding, bridngng and Hangout but still students are not familiar with these them and they just draw some sketche about the feelings) and finally their tangible output (could be simple sketch of community center,park,play ground,...).

Note ! Student will be provided with some access to online videos(as bellow) to know how to create a simple story board

<https://www.youtube.com/watch?v=rv5N6wXjvNg>

<https://www.sketchgroup.com.au/5-visual-thinking-facts-and-whether-they-actually-hold-up/>

<https://prestosketching.com/2023/05/31/how-to-construct-a-great-story/>

https://aci.health.nsw.gov.au/_data/assets/pdf_file/0008/419804/EBCD_Toolkit-Storyboards.pdf

https://www.shsconferences.org/articles/shsconf/pdf/2018/02/shsconf_eduarchsia2018_07004.pdf

<https://www.sketchgroup.com.au/the-sketchcast-episode-1-facilitation-with-ben-crothers/>



Nasim Keshmiri in [Unsplash](#)

A Woman purchasing something

Guiding Questions : Suggests students that before visual adaptation review these questions to make it Guided storyboarding exercise!
What are the social challenges in this neighborhood? How seems the public life there? How and where people interact? what they do for their challenges and with whom?

Big Picture from the first Scenario !

Urban Planning for Social Resilience in Urban Neighborhoods. Transformative Change through Civic Engagement
UPRUN



Conceptual illustration – AI-assisted design process



Funded by
the European Union

This project has received funding under ERASMUS+ Cooperation Partnerships programme.
Project No 2023-1-DE01-KA220-HED-000167004.

UPRUN

Teaching Unit 14

Designing social infrastructure:

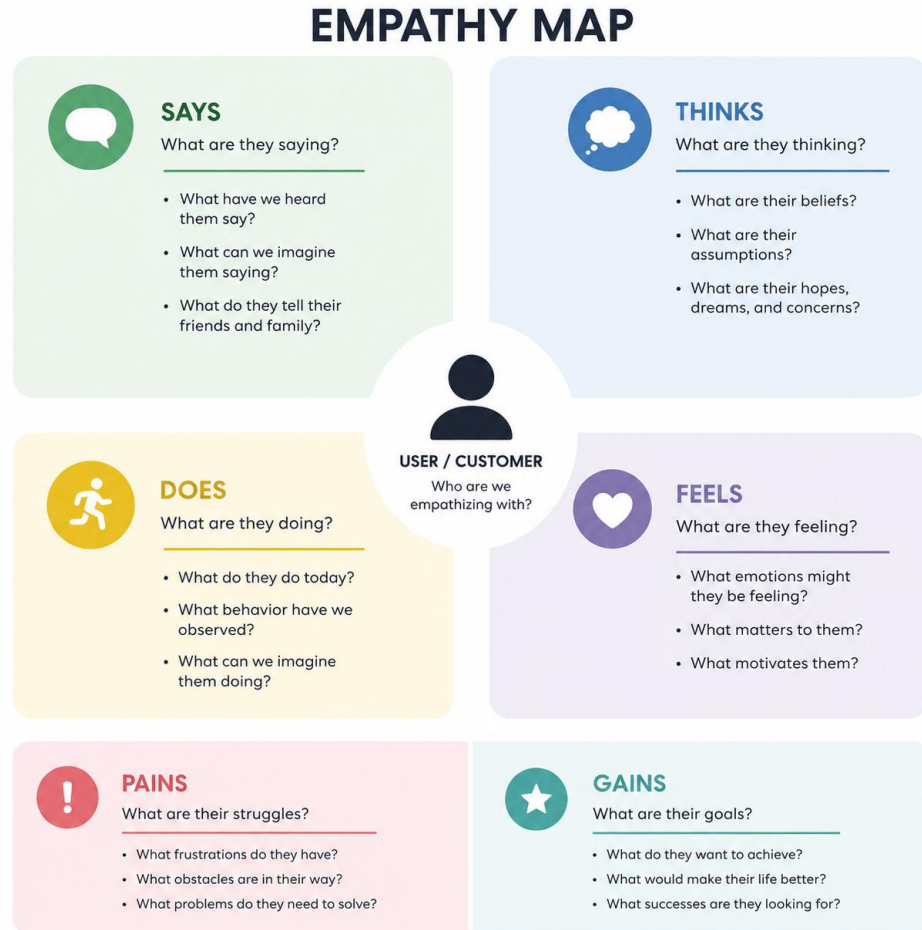
enhancing community resilience through collaborative creation of public spaces and third places

The Second phase : Road Mapping & Presentation

1. Have a short introduction, *10 minutes*, about the process of the one stand course, prepare the simple timeline and plan of the day on the board so that the students know the steps and won't be confused, arrange the groups with separate white boards, round tables, prepare stickers, markers, and boards
2. To support their understanding of social infrastructure—an area they may be unfamiliar with—the second phase includes a short, *20 minutes*, presentation by the teacher using materials provided by the UPRUN unit in advance, to familiarize students with social infrastructure concepts and key themes.

Teaching Material Unit 14 from UPRUN website

Big Picture from the first Scenario !



Conceptual illustration – AI-assisted design process

The Third phase : Empathy mapping and Persona Creating

1. Why this Tool?

- It would help students to think as stakeholders and prevent them from Tunneled vision, to deeper understanding from their quick notes, to enhance their communication and skill in co-working, and to identify insights easier from simple notes

2. How it works? from mystery to codes

Mystery: students have no clue what is priorities and concerns, roles and behaviour of stakeholders, main features of places and relations, etc! they just gathering all collected data through their sticky notes and create a storyboard

Heuristic categorization : Quickly sort data into broad categories

Algorithm : Identify relationships among categories

Code : Collaborate with team members to validate findings and define codes

■ Some Note for Teachers before starting the Empathy mapping process

In this context, Affinity Mapping process aims to help students to show the relationships between information, opinions, problems, solutions, practices and issues relating to social infrastructure development ,within neighborhoods with active civil society initiatives, by placing them in related groups. Therefore its important to:

- I. Define the focus of what is your main topic. Consider what you want to do with your findings (build personas to find stakeholders role ,power,approach, and to help student to understand social infrastructure cathegories in real practice and how they contribute to Bonding,bridging and public life).
- II. Timeboxing is important for realistically managable piece ; arrange and select the groups in advance and lead them so that they move quickly and creatively in 60 minutes
- III. Give students 10 minutes for writing down thoughts after they lesen to your presentation and in case of they have not prepared stickers in advance or would like to add some new stickers to their story board
- IV. Think about what expectations will be set up-front, how you will start and end the workshop, and how much time participants are expected to dedicate to this activity.

How to do it!

➤ Step 1: Fill out the Empathy Map

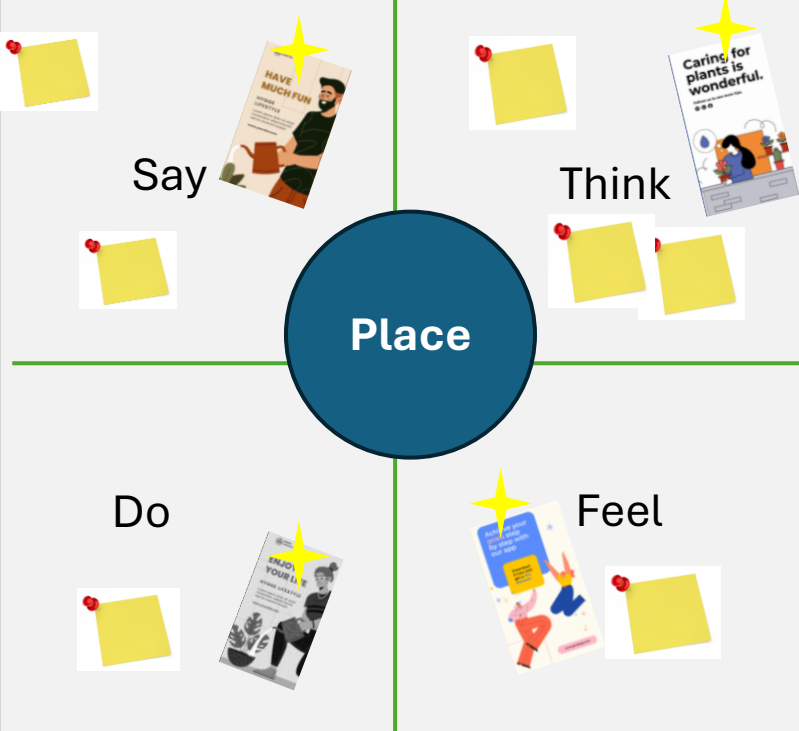
- Lay the four quadrants out on a table, draw them on paper or on a whiteboard.
- Ask students to review their story sticks /notes, pictures and fill out each of the four quadrants while defining and synthesising:
- What did the persona SAY (In this case study, students will use categorized information from the Uprun report to review and write down personas that represent different stakeholders involved in social infrastructure development. If they were to conduct their own research from the beginning, they would gather and categorize inputs from interviews across various groups) Explicitly or implicitly relating to social infrastructure ? Students should look for significant quotes and key words from each Persona within their stickers
- What did the representator Do respecting social infrastructure? Student should describe which actions and behaviors they noticed or insert pictures or drawing
- What did the user THINK? Dig deeper. What do student think that Personas might be thinking? What are their motivations, their goals, their needs, their desires? What does this tell you about their beliefs?
- How did the representator FEEL? What emotions might Personas be feeling?

• Additional Sources and References

<https://www.youtube.com/watch?v=nWCrTuSvlgY>

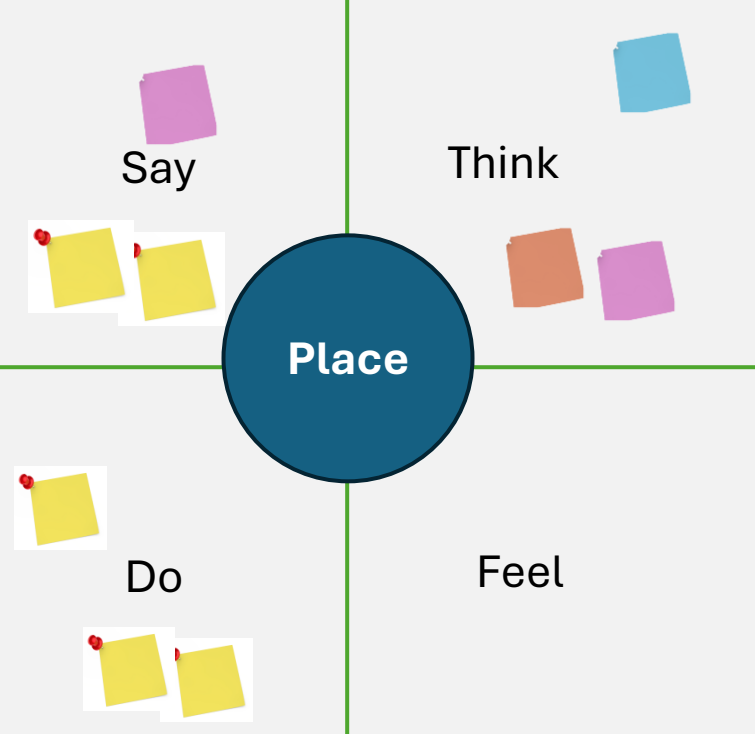
Person1: Civil society initiative
representator

Social Infrastructure Conscious



Persona2: Public body/state representator

Social Infrastructure Conscious



Persona3: Urban planner/designers representator

Social Infrastructure Conscious



• **Additional supporting source:**

https://www.urbanepaxis.berlin/wp-content/uploads/2024/03/Urban_Design_Thinking_stadtstattstrand.pdf

<https://xtensio.com/user-persona-template/>

- **Step 2 : Clustering related information and creating Themes**
- Every team member choose three post they find related to the main themes, it could be included variety of themes depending on your case study and your time, as an example;

First Theme : **Types** including category of Physical structures such as Habs, Havens, Hansout ; park, cofe, playground, community hall,...

Second: **spatial character** including category of social interaction such as Bonding, Bridging, and Just to be/enjoying

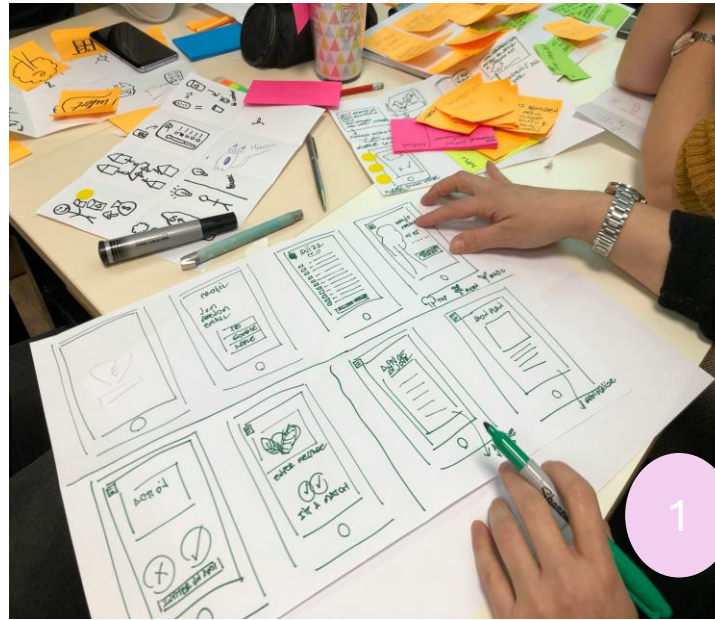
Third: **Socio-political character** category of roles supporting creation of social infrastructures

Remember! In this phase, students will engage with a topic that has long been debated in urban planning and design. It is crucial to critically examine the questions of how, to what extent, and for what purposes communities can become involved as part of the urban planning and design studio pedagogy, which normally integrated with 2 potential risks; the risk of community-based urban design studios in creating unrealistic hopes and expectations that cannot be delivered upon, and the risk of narrow Timespan that affected the feasibility of real collaboration between students and communities (4)

However, Reviewing real practices where civil society plays a fundamental role in shaping the built environment will provide valuable insights for both students and teachers regarding civic engagement in planning and design of the built environment

Additional Sources and References

- <https://www.youtube.com/watch?v=ZRhSG14LOKo>

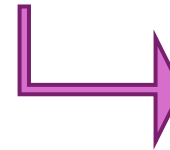


Amélie Mourichon in [Unsplash](#)

students have personas information from UPRUN summary report



Brands&People in [Unsplash](#)



Effectively identified **themes** and **naming** these clusters. students need to Continue to sort and rearrange the information until you feel their themes accurately represent social infrastructure and roles

As an inspiration note: identifying a neighborhood hall from doing sector in quadrant and sense of belonging in feel sector in quadrant, student would reach to the neighborhood hall as a Hub!

They need to cluster information from different personas



Insights!



[Kaleidico](#) auf [Unsplash](#)

Step 3 : From Themes to Insights

Every team ;

Transform each theme into a sentence.

Each theme may result in multiple insight

- Remember: give a few minutes for team members to write down possibilities individually
- Write these to new post-its (different colour) and attach to the large work surface



[Austin Distel](#) in [Unsplash](#)

Step 4 :Revising & Refining

✓ Revisit the challenges

Every team discuss internally how their insight statement relate to social inclusion in neighborhood, they need to narrow down their insights to those that are most relevant to the original social inclusion challenge in 'neighborhood

✓ Refining insight statements

They Experiment with the wording and structuter to best communicate their insight and new perspective

Remember: in this final step,its better to invite some one who is not part of the team to read the insights and reflect them

• Additional sources and References

<https://www.youtube.com/watch?v=ZRhSG14LOKo>

5. Second Scenario

Choose another case study from real world practices

Big Picture from the Second Scenario !



4-week course



Co-working



2X

Teacher+Asist



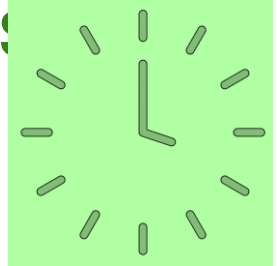
5-6X

- In the second scenario, the process would be the same as the first one, although running as a 4-week course, with some differences in phase arrangements, as below:
- **The first Phase is Road Mapping & Presentation**
- **Selecting a Case study** : Teachers would select a case study that covers social inclusion challenges and the background of civil society initiative activities, it is suggested to follow UPRUN case study selection criteria
- **The second phase is the interactive reading of social infrastructure**
- **First step : The storyboard** : As students are choosing a real word case study, they need to conduct site visits, several interviews, reading documents, and would have a number of verbal data. They can start to make notes from the beginning of the process or use many other tools such as Participatory asset mapping, Shadowing, ... to capture stakeholders information. They might start to create a holistic storyboard and complete it incrementally!
- **Empathy mapping and Persona Creating** : Students collect data from various sources, including an array of interviews, so they should start building a number of personas.
- Students are then asked to identify and have a **final decision upon the number of the personas** and describe them (this is what students have been already provided by UPRUN reports at the first scenario).
- The rest of the process could be the same as the first scenario, however better to be integrated and supported by other tools, such as Stakeholder Journey and participatory mapping, etc.

- [Appendix](#)
- Workshop DesignThinking around places through the UPRUN Case study report

1- Warm-up: Mapping Social Infrastructures

- Ground discussion about your neighborhood .



10 Minutes

➤ Ask within your groups

- Which Physical social infrastructures including public spaces,... appeared in the case study?
- Who initiated or maintained them?
- What social activities, Programmes, interactions and relationships happen there?

2- Empathy Mapping Around Places

- mapping individuals' or groups' emotions, map collective experiences around each elements from social infrastructure:

Guiding Questions :

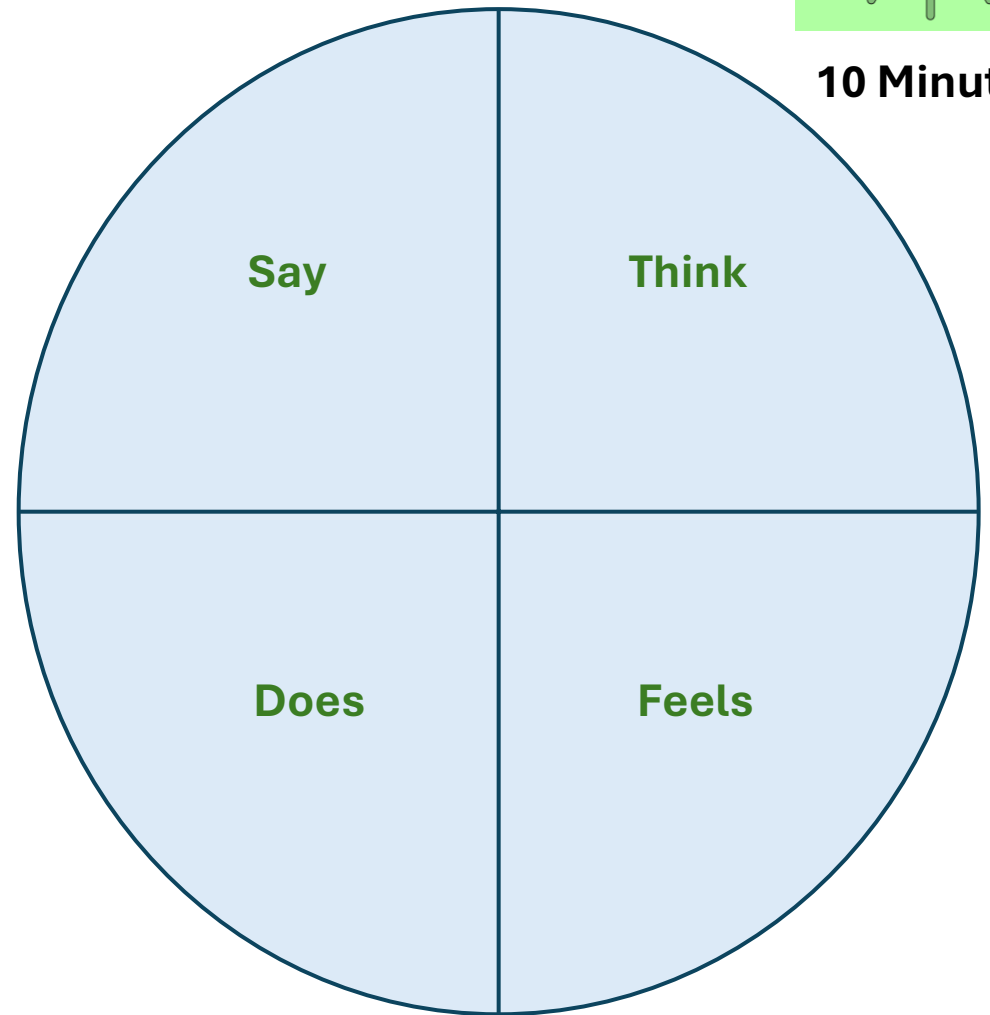
Says / Thinks What do people say or think about this park/café/library/playground,...?

Does / Feels How do they use it? What emotions are attached (pride, safety, attachment, exclusion, identity, togetherness, civic trust, ...)?

Use your sketchy and sticky notes based on observations from the report.



10 Minutes



3- Thematic Clustering

After empathy maps are filled:

➤ Cluster insights under broader themes such as:

- *Bonding spaces* (strengthen ties among similar groups)
- *Bridging spaces* (connect diverse groups)
- Havens, Hubs and Hangouts
- *Roles of actors* (community → initiators; experts → facilitators; authorities → enablers) or any other roles

• **Discuss main questions such as:**

- Which types of social infrastructures, programmes and physical places, promote bridging rather than just bonding? who facilitated the process of bridging?
- Where did collaboration between communities and experts succeed or fail?
- Discuss **The power of 6**



15 Minutes

4-Storyboard: “Bringing Places to Life”



➤ Now move into storytelling mode. Each group creates a storyboard showing how one space evolved:

15 Minutes

- Frames could include:

1. Initial condition or need identified by residents
2. First collaboration attempts with planners/representatives
3. Design/build/use phase showing interaction patterns
4. Current outcomes for inclusion/social life

Suggestion : visual representation — arrows showing connections between actors; sketchy notes illustrating events; sticky notes summarizing emotional shifts.

5- Reflection & Insights



10 Minutes

➤ Ask each other!

- What makes social infrastructures help neighborhoods thrive socially?
- What institutional or informal mechanisms supported inclusion?
- How can planners or designers better support community-led activation of space?

References

- 1-Brown, T., & Wyatt, J. (2010). *Design Thinking for Social Innovation*. Stanford Social Innovation Review / IDEO / World Bank.
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- 2-Pahl-Weber, E., Jeutner, M., Flade, K., & Gabsch, G. (2022). *Leitfaden Ko-Kreation: Urbane Transformationen mit Urban Design Thinking*. Universitätsverlag der Technischen Universität Berlin. DOI:10.14279/depositonce-12852
- 3-Macdonald, E. Designing the urban design studio. In *The Urban Design Reader*; Larice, M., Macdonald, E., Eds.; Routledge: New York, NY, USA, 20; pp. 595–600.
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Urban Planning for Social Resilience in Urban Neighborhoods. Transformative Change through Civic Engagement

UPRUN

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